

4.5 TO 24 VDC BIPOLAR DEVICE

OPERATING CHARACTERISTICS $\triangle 1$ $\triangle 5$

M SR3B-A2

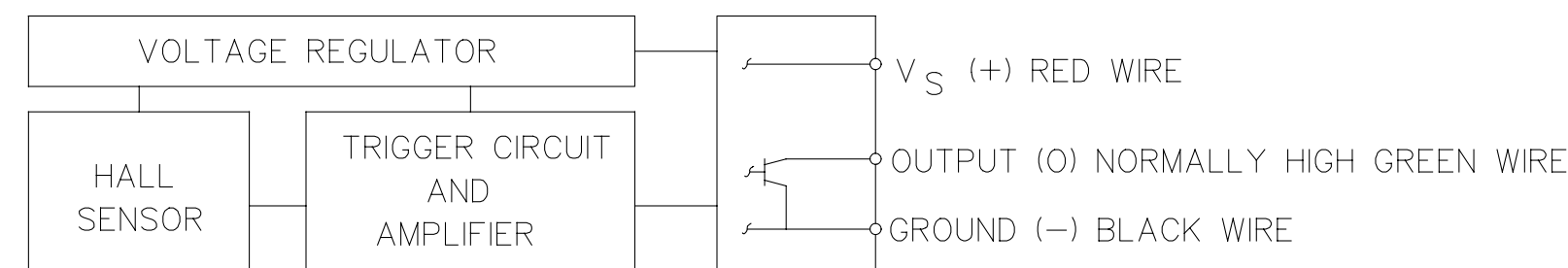
OPERATE MAX	150
RELEASE MIN	-150
DIFF MIN	40
(TEMP RANGE -40°C TO 85°C)	

ABSOLUTE MAXIMUM RATINGS

SUPPLY VOLTAGE (V _S) $\triangle 7$	-24.0 VDC TO +28.0 VDC
VOLTAGE EXTERNALLY APPLIED TO OUTPUT	+28 VOLTS DC MAX WITH SWITCH IN "OFF" CONDITION ONLY -0.5 VOLTS MAX WITH SWITCH IN "OFF" OR "ON" CONDITION
OUTPUT CURRENT	20 mA
TEMPERATURE OPERATE AND STORAGE	-40°C TO 85°C
MAGNETIC FLUX	NO LIMIT, THE CIRCUIT CANNOT BE DAMAGED BY MAGNETIC OVERDRIVE

ELECTRICAL CHARACTERISTICS

	MIN	TYP	MAX	REMARKS
SUPPLY CURRENT $\triangle 4$		5 mA	15.0 mA	V _s = 6-24 VOLTS $\triangle 7$
OUTPUT VOLTAGE (OPERATED) $\triangle 5$		0.2 V	0.4 V	SINKING 20 mA PER OUTPUT
OUTPUT LEAKAGE CURRENT (RELEASED) $\triangle 5$			20 μ A	LEAKAGE INTO SWITCH OUTPUT
OUTPUT SWITCHING TIME				
RISE TIME $\triangle 5$		0.2 μ SEC	1.5 μ SEC	10% TO 90%
FALL TIME		0.1 μ SEC	0.5 μ SEC	90% TO 10%



BLOCK DIAGRAM SHOWING CURRENT SINKING OUTPUTS

NOTES

- $\triangle 1$ FLUX ENTERING THE SOUTH POLE OF THE MAGNET WILL OPERATE THE SENSOR WHEN MAGNET IS POSITIONED AS SHOWN IN FIGURE 2. THIS ASSUMES THE CONVENTION THAT THE DIRECTION OF THE EXTERNAL FLUX OF A MAGNET IS FROM THE NORTH TO THE SOUTH POLE OF THE MAGNET. BIPOLAR DEVICES REQUIRE THE PRESENTATION OF BOTH SOUTH AND NORTH POLES IN ORDER TO ENSURE SENSORS OPERATE AND RELEASE RESPECTIVELY (FIGURES 2 AND 3)
- $\triangle 2$ LEADWIRES (INDIVIDUAL WIRES) ARE 24 GAGE STRANDED WITH XLPE INSULATION
- $\triangle 3$ DATE CODE LOCATED IN THIS AREA
- $\triangle 4$ AT 24 \pm 2°C
- $\triangle 5$ AT SUPPLY VOLTAGE OF 6 TO 24 VOLTS AND FULL TEMPERATURE RANGE
- $\triangle 6$ CATALOG LISTING LOCATED IN THIS AREA
- $\triangle 7$ V_s IS THE UNREGULATED SUPPLY VOLTAGE
- $\triangle 8$ TORQUE ON PLASTIC NUTS MUST NOT EXCEED 12 INCH POUNDS

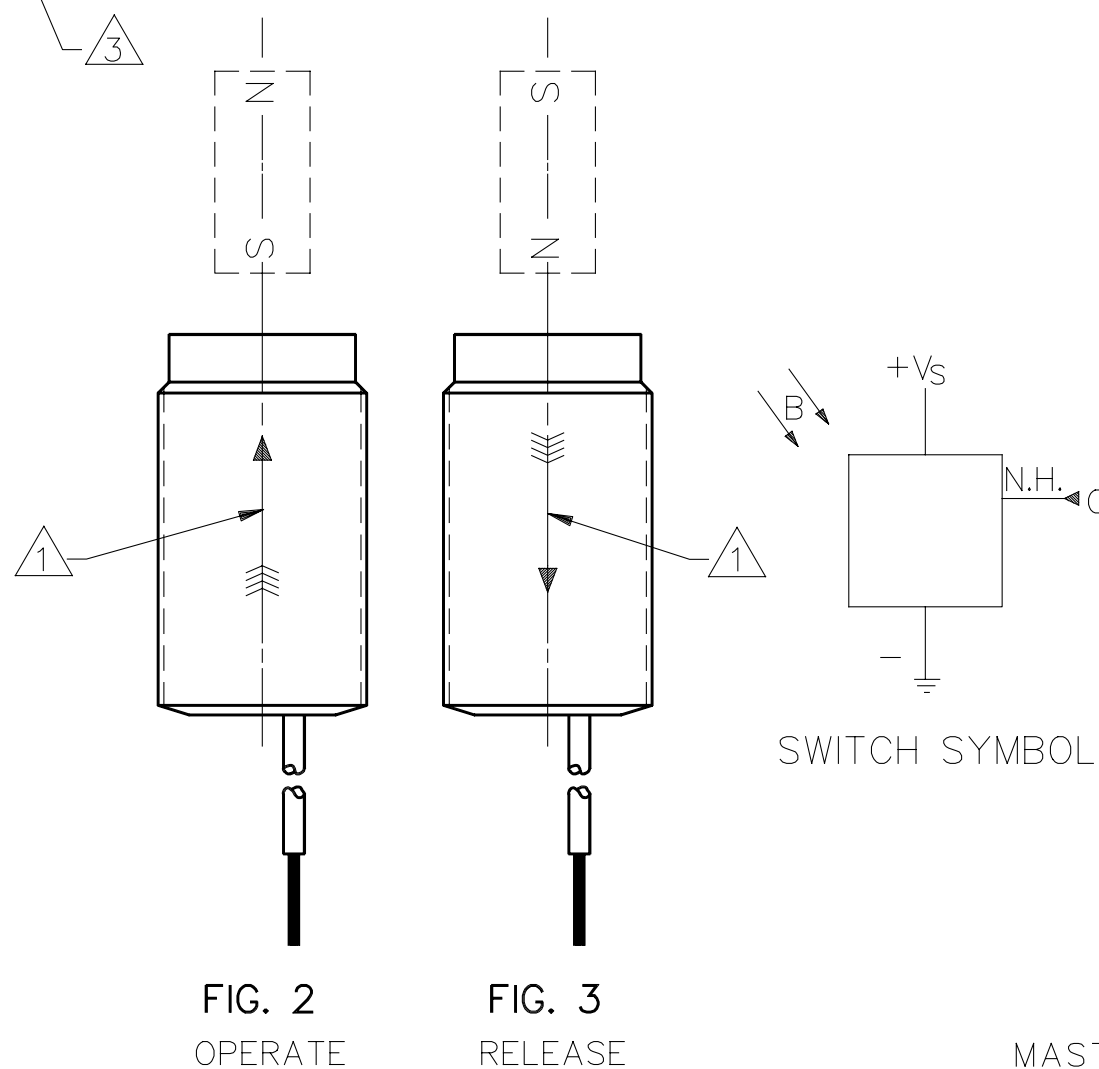
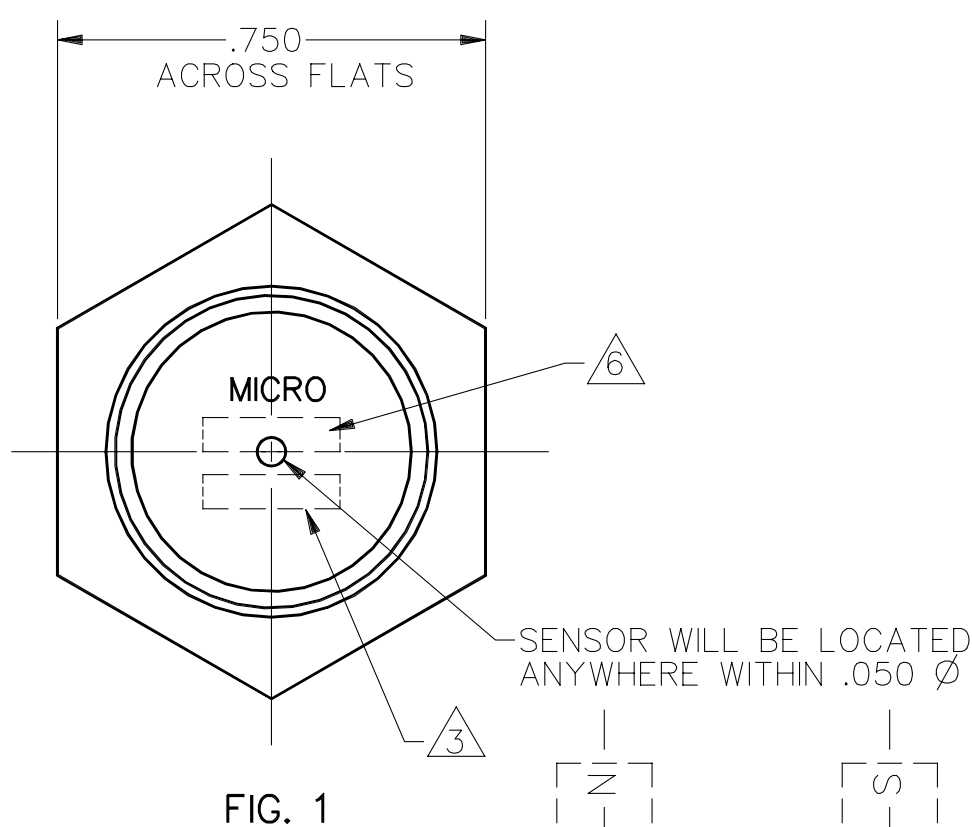
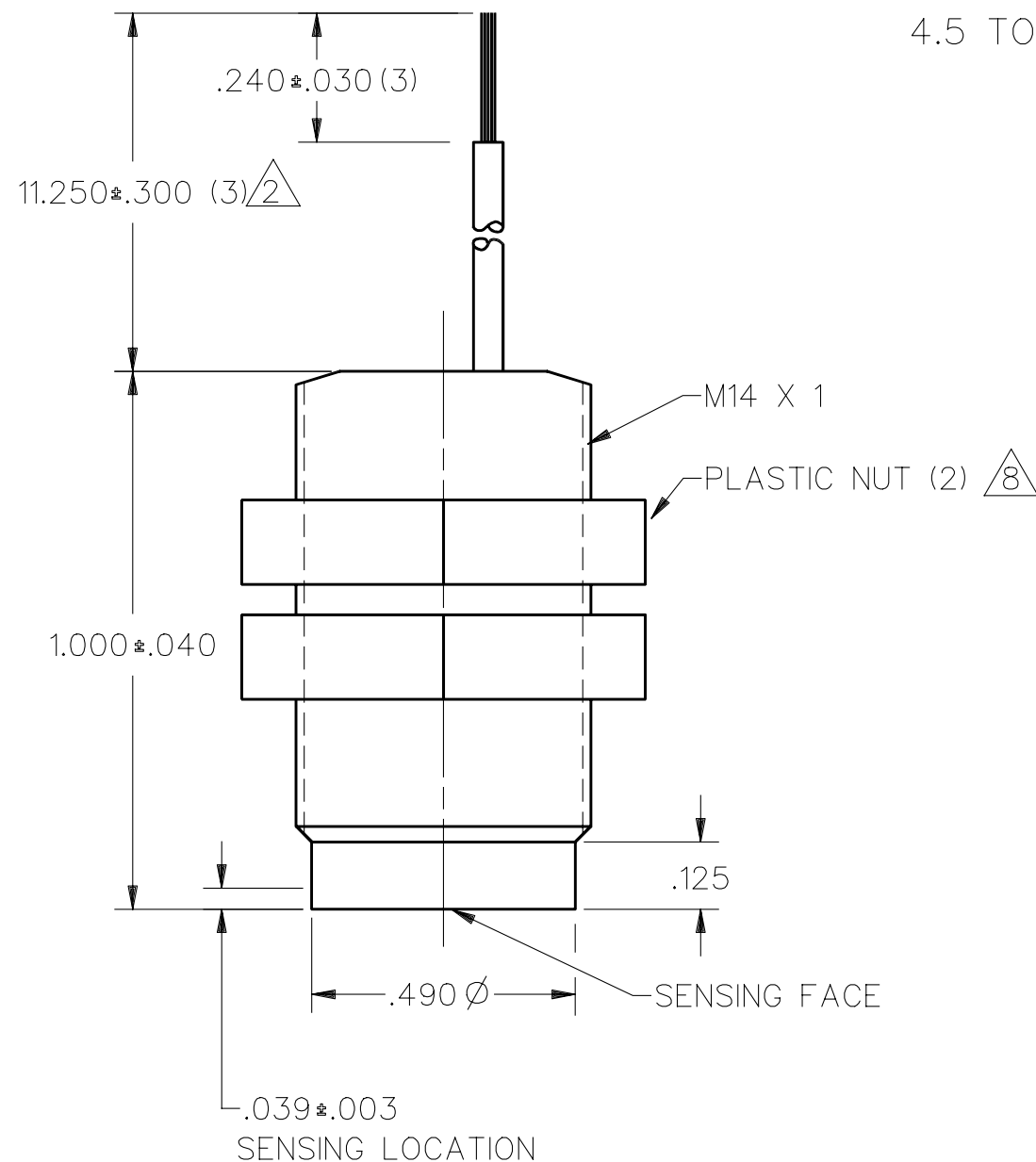


FIG. 2 OPERATE

FIG. 3 RELEASE

MASTER REDUCED
ANSI Y14.5M-1982 APPLIES

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MAGNETICALLY OPERATED CYLINDRICAL HALL SWITCH

CATALOG LISTING
SR3B-A2

THIRD ANGLE PROJECTION

SCALE 3:1

DO NOT SCALE PRINT

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE

ONE PLACE	(.0)	±.030
TWO PLACES	(.00)	±.015
THREE PLACES	(.000)	±.005
ANGLES		±

WEIGHT

DDM/CAD DRAWN W L S 29 NOV 89 CHECK D A W 27 DEC 89
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